DT09 Rec'd PCT/PT0 2.8 SEP 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE 10/509115

Applicant: Albert E. Sanderson et al.

Art Unit : Unknown

Serial No.: Not Yet Assigned

Examiner: Unknown

Filed

: Herewith

Title

: VARIABLE STROKE/CLEARANCE MECHANISM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449. A copy of communications from a foreign patent office in a counterpart application are also enclosed.

This statement is being filed with the application. Accordingly, only copies of foreign patent documents and non-patent literature are enclosed. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 9/28/04

Reg. No. 38,524 46,031

Fish & Richardson P.C. 1425 K Street, N.W. 11th Floor

Washington, DC 20005-3500 Telephone: (202) 783-5070 Facsimile: (202) 783-2331

40238699.doc

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1

A No. A No. Not Yet Assigned 15 Not Yet Assigned 15 Not Yet Assigned 28 SEP 2004

Information Disclosure Statement
by Applicant
(Use several sheets if necessary)

Applicant Albert E. Sanderson et al.

Filing Date Herewith

Group Art Unit

(37 CFR §1.98(b))

				ent Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	748,559	12/29/1903	Peet			
	AB	812,636	2/13/1906	Callan			
·	AC	821,546	5/22/1906	Smallbone			
	AD	1,019,521	3/5/1912	Pratt			
	AE	1,161,152	11/23/1915	Nyborg			
	AF	1,194,258	8/8/1916	Walker			
	AG	1,210,649	1/2/1917	Holley et al.			
	AH	1,255,973	2/12/1918	Almen			
	AI	RE15,442	9/5/1922	Almen			
	AJ	1,577,010	3/16/1926	Whatley			
	AK	1,648,000	11/8/1927	Lee			
	AL	1,659,374	2/14/1928	Robson			
	AM	1,673,280	6/12/1928	Evans			
	AN	1,772,977	8/12/1930	Arrighi			
	AO	1,842,322	1/19/1932	Hulsebos			
	AP	1,857,656	5/10/1932	Oldfield			
	AQ	1,894,033	1/10/1933	Farwell			
	AR	1,968,470	7/31/1934	Szombathy			
	AS	2,042,730	6/2/1936	Redrup			
	AT	2,048,272	7/31/1936	Linthicum			
	AU	2,104,391	1/4/1938	Redrup			
	AV	2,112,934	2/23/1937	Stinnes et al.			
	AW	2,151,614	9/17/1937	Nevatt et al.			
	AX	2,247,527	11/10/1939	Stinnes			
	AY	2,256,079	9/16/1941	Dinzl			
	AZ	2,263,561	11/25/1941	Biermann			
	BA	2,282,722	1/30/1940	Hall			

Examiner Signature

Date Considered

Substitute Form PTO-1449 (Modified)

(37 CFR §1.98(b))

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

Applicant

Applicant DT09 Rec'd PCT/PT0
Albert E. Sanderson et ar. T/PT0 28 SEP 2004

Filing Date Herewith **Group Art Unit**

BB	2,302,995	11/24/1942	Holmes		
ВС	2,303,838	12/1/1942	Hall		
BD	2,335,048	11/23/1943	Feroy		
BE	2,341,203	8/31/1942	Borer		
BF	2,357,735	7/3/1943	Hall		
BG	2,465,510	10/23/1944	Bonnafe		
ВН	2,513,083	06/27/1950	Eckert		
BI	2,532,254	11/28/1950	Bouchard		
BJ	2,539,880	1/30/1951	Wildhaber		
BK	2,653,484	9/29/1953	Zecher		
BL	2,737,895	3/13/1956	Ferris		
ВМ	2,827,792	1/22/1953	Hopkins		
BN	2,910,973	11/3/1959	Witzky		
ВО	2,940,325	6/14/1960	Nesch		
BP	2,957,421	10/25/1960	Mock		
BQ	3,000,367	9/19/1961	Eagleson		
BR	3,076,345	2/5/1963	Leciercq		
BS	3,077,118	2/12/1963	Robbins		
ВТ	3,176,667	4/6/1965	Hammer		
BU	3,182,644	5/11/1965	Drtina		
BV	3,198,022	8/3/1965	Algor de Waern		
BW	3,273,344	9/20/1966	Christenson		
BX	3,292,554	12/20/1966	Hessler		
BY	3,386,425	6/4/1968	Morsell		
BZ	3,528,317	9/15/1970	Cummins		
CA	3,590,188	6/29/1971	Frink et al.		
СВ	3,654,906	4/11/1972	Airas		
CC	3,842,440	10/22/1974	Karlson		
CD	3,847,124	11/12/1974	Kramer		

Examiner Signature

Date Considered

Sheet <u>3</u> of <u>9</u>

28 SEP 2004

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No.

09850-016US1
Applicant

Applicant

Applicant

Attorney's Docket No.

Not Yet Assigned

Not Yet Assigned

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

Albert E. Sanderson et al.

Filing Date Herewith

Group Art Unit

(37 CFR §1.98(b))

	CE	3,861,829	1/21/1979	Roberts et al.		
	CF	3,877,839	4/15/1975	Ifield		
	CG	3,939,809	2/24/1976	Rohs		
	СН	3,945,359	3/23/1976	Asaga		
	CI	3,959,983	6/1/1976	Roberts et al.		
	Cl	3,968,699	7/13/1973	van Beukering		
	CK	3,969,046	7/13/1976	Wynn		
-	CL	3,974,714	8/17/1976	Fritsch		
	СМ	4,011,842	3/15/1977	Davies et al.		
	CN	4,060,178	11/29/1977	Miller		
	СО	4,066,049	1/3/1978	Teodorescu et al.		
	СР	4,075,933	2/28/1978	Stephens		
	CQ	4,077,269	3/7/1978	Hodgkinson	-	
	CR	4,094,202	6/13/1978	Kemper		
	CS	4,100,815	7/18/1978	Kemper		
	СТ	4,112,826	9/12/1978	Cataldo		
	CU	4,144,771	3/20/1979	Kemper et al.		
	CV	4,152,944	5/8/1979	Kemper		
	CW	4,168,632	9/25/1979	Fokker		
	СХ	4,174,684	11/20/1979	Roseby et al.		
	CY	4,178,135	12/11/1979	Roberts		
	CZ	4,178,136	12/11/1979	Reid et al.		
	DA	4,203,396	5/20/1980	Berger		
	DB	4,208,926	6/24/1980	Hanson		
	DC	4,231,724	11/4/1980	Hope et al.		_
	DD	4,235,116	11/25/1980	Meijer et al.		
	DE	4,236,881	12/2/1980	Pfleger		
	DF	4,270,495	6/2/1981	Freudenstein et al.		
	DG	4,285,303	8/25/1981	Leach		

Examiner S	Signature
------------	-----------

Date Considered

Sheet <u>4</u> of <u>9</u>

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1

10a/on5o09115 Not Yet Assigned

Information Disclosure Statement by Applicant

Applicant DT09 Rec'd PCT/PT0
Albert E. Sanderson et al.

2.8 SEP 2004

(Use several sheets if necessary)

Filing Date Herewith Group Art Unit

(37 CFR §1.98(b))

DH	4,285,640	8/25/1981	Mukai		
DI	4,294,139	10/13/1981	Bex et al.		
DJ	4,297,085	10/27/1981	Brucken		
DK	4,323,333	4/6/1982	Apter et al.		
DL	4,342,544	8/3/1982	Pere		
 DM	4,345,174	8/17/1982	Angus		
DN	4,349,130	9/14/1982	Bair		
DO	4,418,586	12/6/1983	Maki et al.		
 DP	4,433,596	2/28/1984	Scalzo		
DQ	4,433,596	2/28/1984	Scalzo		
DR	4,449,444	5/22/1984	Forster		
DS	4,454,426	06/12/1984	Benson		
DT	4,478,136	10/23/1984	Heiser et al.		
DU	4,489,682	12/25/1984	Kenny		
DV	4,491,057	1/1/1985	Ziegler		
DW	4,505,187	3/19/1985	Burgio di Aragona		
DX	4,513,630	4/30/1985	Pere et al.		
DY	4,515,067	5/7/1985	Heyl		
DZ	4,545,507	10/8/1985	Barall		
EA	4,569,314	2/11/1986	Milu		
EB	4,602,174	07/22/1986	Redlich		
EC	4,708,099	11/24/1987	Ekker		
ED	4,715,791	12/29/1987	Berlin et al.		
EE	4,729,717	3/8/1988	Gupta		
EF	4,776,259	10/11/1988	Takai		
EG	4,780,060	10/25/1988	Terauchi		
ЕН	4,811,624	3/14/1989	Fritsch		
EI	4,852,418	8/1/1989	Armstrong		
EJ	4,869,212	9/26/1989	Sverdlin		

Examiner Signature

Date Considered

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

Applicant DT09 Rec'd PCT/PT0 28 SEP 2004 Albert E. Sanderson et al. Filing Date

Applicant

Herewith

Group Art Unit

(37 CFR §1.98(b))

EK	4,920,859	5/01/1990	Smart et al.		
EL	4,941,809	7/17/1990	Pinkerton		
EM	4,966,042	10/30/1990	Brown		
EN	5,002,466	3/26/1991	Inagaki et al.		
 EO	5,007,385	4/16/1991	Kitaguchi		
EP	5,025,757	6/25/1991	Larsen		
EQ	5,027,756	7/2/1991	Shaffer		
ER	5,044,889	9/3/1991	Pinkerton		
ES	5,049,799	9/17/1991	Tsai et al.		
ET	5,063,829	11/12/1991	Takao et al.		
EU	5,088,902	2/18/1992	Marioni		
 EV	5,094,195	3/10/1992	Gozalez	· · · · · ·	
EW	5,102,306	4/7/1992	Liu		
EX	5,113,809	5/19/1992	Ellenburg		
EY	5,129,797	7/14/1992	Kanamaru		
EZ	5,136,987	8/11/1992	Schechter et al.		
FA	5,154,589	10/13/1992	Ruhl et al.		
FB	5,201,261	4/13/1993	Kayukawa et al.		
FC	5,261,358	11/16/1993	Rorke		
FD	5,280,745	1/25/1994	Maruno		
FE	5,329,893	7/19/1994	Drengel et al.		
FF	5,336,056	8/9/1994	Kimura et al.		
FG	5,351,657	10/4/1994	Buck		
FH	5,405,252	4/11/1995	Nikkamen		
FI	5,437,251	8/1/1995	Anglim et al.		
FJ	5,535,709	7/16/1996	Yashizawa		
FK	5,542,382	8/6/1996	Clarke		
FL	5,553,582	9/10/1996	Speas		
FM	5,562,069	10/8/1996	Gillbrand et al.		

Examiner S	signature
------------	-----------

Date Considered

28 SEP 2004

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1 DT09 Rec'd PCT/PTO

Applicant

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

Albert E. Sanderson et al.

Filing Date Herewith **Group Art Unit**

(37 CFR §1.98(b))

FN	5,572,904	11/12/1996	Minculescu		
FO	5,596,920	1/28/1997	Umemura et al.		
FP	5,605,120	2/25/1997	Hedelin		
FQ	5,630,351	5/20/1997	Clucas		
FR	5,634,852	6/3/1997	Kanamaru		
FS	5,676,037	10/14/1997	Yoshizawa		
FT	5,699,715	12/23/1997	Forster		
FU	5,699,716	12/23/1997	Ota et al.		
FV	5,704,274	1/06/1998	Forster		
FW	5,762,039	6/9/1998	Gonzalez		
FX	5,768,974	6/23/1998	Ikeda et al.		
FY	5,782,219	7/21/1998	Frey, et al.		
FZ	5,785,503	7/28/1998	Ota et al.		
 GA	5,818,132	10/06/1998	Konotchick		
GB	5,839,347	11/24/1998	Nomura et al.		
GC	5,890,462	4/6/1999	Bassett		
GD	5,894,782	4/20/1999	Nissen et al.		
GE	5,897,298	4/27/1999	Umemura		
 GF	5,927,560	7/27/1999	Lewis et al.		
GG	5,931,645	8/3/1999	Goto et al.		
GH	6,012,903	1/11/2000	Boelkins		
GI	6,053,091	4/25/2000	Тојо		
GJ	6,065,433	5/23/2000	Hill		
GK	6,074,174	6/13/2000	Lynn et al.		
GL	6,155,798	12/5/2000	Deininger et al.		
GM	6,397,794	6/4/2002	Sanderson et al.		
 GN	6,422,831	7/23/2002	Ito et al.		
 GO	US-2002- 0106238	8/8/2002	Sanderson et al.		
GP	6,446,587	9/10/2002	Sanderson et al.	 	

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1

Not Yet Assigned

Information Disclosure Statement by Applicant

Applicant DT09 Rec'd PCT/PT0
Albert E. Sanderson et al.

10 28 SEP 2004

(Use several sheets if necessary)

Filing Date Herewith Group Art Unit

(37 CFR §1.98(b))

GQ	6,460,450	10/8/2002	Sanderson et al.
GR	US-2002- 0194987	12/26/2002	Sanderson et al.
GS	US-2003- 0084785	05/08/2003	Sanderson et al.
GT	US-2003- 0138331	07/24/2003	Sanderson et al.

	Foreig	n Patent Doo	cuments or P	ublished Foreign	Patent A	Applicatio	ns	
Examiner	Desig.	Document	Publication	Country or				slation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	GU	EP 0052387	10/18/1981	European				
	GV	461,343	12/26/1913	France				
	GW	815,794	04/1937	France			X	
	GX	1 015 857	10/27/1952	France				
	GY	1,416,219	9/20/1965	France			Х	
	GZ	1,450,354	7/18/1966	France			Х	
	НА	2,271,459	11/9/1973	France			Х	
	НВ	2 300 262	2/4/1975	France			Х	
	НС	2,453,332	4/6/1979	France			Х	
	HD	2 566 460	12/1985	France			Х	
	HE	FR 2 649 755	01/18/1991	France				
	HF	89,352	12/31/1895	Germany				
	HG	345,813	7/25/1917	Germany			Х	
	нн	515,359	12/18/1930	Germany				
	HI	698,243	10/1940	Germany				
	НЈ	1 037 799	12/1/1958	Germany			Х	_
	HK	1,451,926	5/7/1965	Germany			Х	
	HL	DT 2346836 A1	03/1975	Germany		_	x	
	НМ	DE 2612270	09/22/1977	Germany			X	
	HN	DE 27 51 846	11/19/1977	Germany			Х	
	НО	DE 29 31 377	2/26/1981	Germany			Х	

Date Considered

Sheet 8 of 9

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 09850-016US1

Not Yet Assigned

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

Albert E. Sanderson et al.

Applicant DT09 Rec'd PCT/PTO 28 SEP 2004

Filing Date Herewith **Group Art Unit**

/37	CFR	R1	QR	'n	١١
(4)	O1 17	3''	. 301	w	"

	_						
	HP	DE 3420529	12/05/1985	Germany		x	
	НQ	DE 37 00 005	7/14/1988	Germany		Х	
	HR	282,125	12/1927	Great Britain			
	HS	GB 651893	04/11/1951	Great Britain			
	НТ	55-37541	9/9/1978	Japan		Х	
	HU	60-164677	8/27/1985	Japan		X	
	HV	61-212656	9/20/1986	Japan		Х	
	HW	62-113938	4/25/1987	Japan		Х	
	НХ	JP 09151840	06/10/1997	Japan		Х	
	НҮ	121,961	1/8/1920	United Kingdom			
	HZ	220,594	3/1924	United Kingdom			
·	IA	629,318	9/1947	United Kingdom			
	IB	GB 2030254	10/3/1978	United Kingdom			
	IC	1,595,600	8/21/1981	United Kingdom			
	ID	WO 91/02889	03/07/1991	WIPO			
	IE	WO 92/11449	07/1992	WIPO			
	IF	WO 97/10415	3/20/1997	WIPO			
	IG	WO 99/14471	03/25/1999	WIPO			
	IH	WO 00/15955	03/23/2000	WIPO			
	II	WO 01/11237	02/15/2001	WIPO			
	IJ	WO 02/063139	08/15/2002	WIPO			
	IK	WO 03/100231	12/04/2003	WIPO			

Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.		
Initial	ID	Document	
	IL	Advanced diaphragm metering pump technology for lower pressure applications, LEWAecodos®	
	IM	Bloomfield, Louis A., "How Things Work: Electric Motors," howthingswork. Virginia.edu, October 25, 2001, http://rabi.phys.virginia.edu/HTW/electric_motors.html.	
	ΙN	Den Hartog, J.P. (Jacob Pieter), "Problem 144" 1956 New York	
	IO	ECycle Inc. schematic	

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
next communication to applicant.	,

Sheet <u>9</u> of <u>9</u>

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09850-016US1

10 509115 Not Yet Assigned

Information Disclosure Statement
by Applicant
(Use several sheets if necessary)

1-4

Applicant DT09 Rec'd PCT/PT0 28 SEP 2004 Albert E. Sanderson et al.

Filing Date Herewith

Group Art Unit

(37 CFR §1.98(b))

	Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.			
Initial	ID	Document		
	IP	Freudenstein, "Development of an Optimum Variable-Stroke Internal-Combustion Engine Mechanism from the Viewpoint," Journal of Mechanisms, Transmissions, and Automation in Design, vol. 105, pp. 259-266, 1984.		
	IQ	Freudenstein, "Kinematic Structure of Mechanisms for Fixed and Variable-Stroke Axial-Piston Reciprocating Machines," Journal of Mechanisms, Transmissions, and Automation in Design, VI. 106, pp. 355-363, 1984.		
	IR	Metering Pumps, LEWA modular®, American Lewa, The Technology Advantage.		
	IS	Red Barn Engineering Presents, "Internal Combustion Motor with Integral Electric Generator For Use In Electric Vehicles," The MOGEN – Motor Generator – Hybrid Vehicles, http://www.mogen.net/index.shtml , copyright 1998.		
	IT	Redlich, Robert, "A Summary of Twenty Years Experience with Linear Motors and Alternators," Sunpower, Inc., Athens, Ohio, U.S.A., 1996, http://www.sunpower.com/tech_papers/pub64/linmot.html.		
	IU	Sunpower, Inc., "High Efficiency, Oil-Free Compressor: Better Machines for A Better World, "http://www.sunpower.com/compressors/compressor/index.html.		
	IV	International Search Report mailed August 19, 2003 in Int. App. No. PCT/US03/09702.		
	IW	International Search Report mailed May 31, 2002 in Int. App. No. PCT/US02/03220.		
	IX	Written Opinion mailed December 03, 2002 in Int. App. No. PCT/US02/03220.		

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
next communication to applicant.	